

ABSTRACT OF THE INVENTION

A ~~The present invention relates to an~~ An optical transmitter ~~having the structure for~~
~~enabling~~ enables output of high-power light signals while effectively suppressing occurrence of
the nonlinear optical phenomena, particularly, SBS, and an optical communication system
provided therewith. The optical transmitter comprises a modulation signal source for outputting
modulation signals of the frequency not more than 20 kHz, a semiconductor laser source for
outputting laser light amplitude-modulated according to the modulation signals from the
modulation signal source, an optical amplifier for amplifying the laser light from the
semiconductor laser source, and a modulation depth control system for controlling a ratio of an
amplitude modulation depth of amplified laser light outputted from the optical amplifier to an
amplitude modulation depth of the laser light outputted from the semiconductor laser source.
~~Particularly, the~~ The modulation depth control system controls the amplitude modulation depth
of the amplified laser light outputted from the optical amplifier at least in the range of 60% or
less of the amplitude modulation depth of the laser light inputted into the optical amplifier.

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Amend the title as follows:

OPTICAL ~~TRANSMITTER AND OPTICAL COMMUNICATION~~ TRANSMISSION
SYSTEM ~~PROVIDED THEREIN~~ FOR REDUCING NONLINEAR OPTICAL PHENOMENA
USING MODULATION DEPTH CONTROL SYSTEM